

E-MAIL ADDRESS: plumasco@psln.com FEDERAL TAX ID. NO.: 680016418

PROJECT TYPE: Local watershed management plan (CalFed R5-1)

LEGISLATIVE INFORMATION
Senate District 1 Assembly District 3
United States Congressional District 2

CALFED, RWQCB, or SWRCB STAFF CONTACTED REGARDING THIS PROPOSAL:

Contact:	<u>Dennis Heiman</u>	Contact:	<u></u>
Phone No.:	<u>530-224-4851</u>	Phone No.:	<u></u>
Dates contacted:	<u>April 8, 2002</u>	Dates contacted:	<u></u>

PRIMARY COOPERATING ENTITIES:

Entity Name:	<u>Plumas National Forest</u>	
Role/Contribution to Project:	<u>Historic and existing data</u>	
Contact Person:	<u>Denny Churchill</u>	Phone No.: <u>530-283-7683</u>
E-mail address:	<u>Dchurchill@fs.fed.us</u>	

Entity Name:	<u>Dept. Water Resources</u>	
Role/Contribution to Project:	<u>Data collection/ mapping</u>	
Contact Person:	<u>Kevin Pond</u>	Phone No.: <u>530-528-7417</u>
E-mail address:	<u>Pondk@water.ca.gov</u>	

WATERBODY/WATERSHED
(Include Catalog Number in
Section 18 of the ARD):

18020121

GPS COORDINATES FOR
PROJECT LOCATION, IF
AVAILABLE:

FISCAL SUMMARY:

Proposition 13 Funds Requested	<u>\$ 170,000</u>
Other Project Funds	<u>\$ 55,000</u>
Total Project Budget	<u>\$ 225,000</u>

CERTIFICATION

Please read before signing.

I certify under penalty of perjury that the information I have entered on this application is true and complete to the best of my knowledge and that I am entitled to submit the application on behalf of the applicant (if the applicant is an entity/organization). I further understand that any false, incomplete, or incorrect statements may result in the disqualification of this application. By signing this application, I waive any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in this RFP.

Applicant Signature

Date

James Wilcox

Printed Name of Applicant

PART B – PROJECT NARRATIVE (not to exceed 10 pages)

Project Objectives

This project entails developing a detailed watershed assessment and comprehensive community-based restoration strategy for the Spanish Creek watershed from its headwaters to the bottom of American Valley. Our long-term goals are to (1) stabilize the entrenched channel by reducing sedimentation and bank erosion; (2) build the community's capacity to collaborate and implement sound watershed management practices; and (3) transfer technology regarding sediment transport and harvesting in gullied systems.

Project Location

The eight mile main stem project site is in the 95 square mile upper Spanish Creek watershed located within Plumas County in the northern Sierra Nevada mountains. It is within and upstream of the town of Quincy. Spanish Creek is a tributary to the 3,222 square mile upper North Fork Feather River. The Feather River contributes more run-off than any other watershed in the Sacramento River Basin.

Project Team

This project will be administered and managed by Plumas Corporation, a non-profit local community project implementation entity within the Feather River Coordinated Resource Management Group (FR-CRM). FR-CRM is an alliance of natural resource management agencies, local landowners, private interests, and the public with 21 public and private entities that formed in 1985 to work on restoration of the Feather River Watershed. Signatories to the FR-CRM are:

Federal: Plumas National Forest, USFS/USDA; Natural Resource Conservation Service, USDA; North Cal-Neva Resource Conservation and Development Area; U.S. Army Corps of Engineers; Farm Services Agency, USDA; US Fish and Wildlife Service.

State of California: Department of Fish and Game; Department of Forestry and Fire Protection; Department of Parks and Recreation; Department of Transportation; Department of Water Resources; Regional Water Quality Control Board, central Valley; University of California Cooperative Extension.

Local Government: Plumas County; Plumas County Community Development Commission; Plumas Unified School District; Feather River Resource Conservation District; Feather River College.

Private: Pacific Gas & Electric; Salmonid Restoration Federation; Plumas Corporation.

Each of those entities has some involvement in all current and previous projects managed by the FR-CRM. This project involves CRM members, as well as other major participants and their roles will be as follows:

Landowners along Spanish Creek (most are not CRM members) – will provide access to their property for data collection and restoration implementation. Letters of support have been received by the CRM.

Plumas National Forest – will provide geographic information system (GIS) mapping support; sharing and analysis of existing data.

Department of Water Resources – will conduct further field data collection and provide mapping support.

Desert Research Institute (DRI; not a CRM member) – will provide technical support on data collection, geomorphological analysis, bank stabilization design, and computational modeling.

U.S. Bureau of Reclamation (USBR), Denver Service Center (not a CRM member) – will provide technical review of the restoration design and the conceptual bank erosion control strategy.

Caltrans – will collaborate on the reconstruction of the highway 70 bridge over Spanish Creek.

Project Background

The primary sources of destabilization in the Spanish Creek watershed are historic hydraulic mining and channelization. Spanish Creek is currently channelized through American Valley, with a high gravel/cobble bedload from the still-unstable hydraulic mine sites. A local entrepreneur took advantage of the high bedload; and began using the upper reaches of American Valley as a commercial gravel source in 1960. The gravel operation was sold in the mid 1990's, and the California Department of Fish and Game began enforcement of stricter regulations on the gravel harvest to improve aquatic habitat. Once gravel harvesting was curtailed, however, landowners along Spanish Creek observed formation of mid-channel bars; and loss of their land. Even before the decrease in gravel removal, numerous small projects had been implemented in the watershed to curtail erosion. Most of these were located in upper reaches on Plumas National Forest lands, but some were constructed by private landowners (rip-rap, gravel bar removal). Based on a recognized need for a coordinated strategy, landowners approached Plumas Corporation and FR-CRM for assistance. This application is a result of the landowners' desire to work together to address the problem of bank erosion.

We propose to address a synergistic array of resource issues in the upper 95 square miles of the Spanish Creek watershed. Our primary focus will be in the watershed's largest depositional reach, American Valley, an eight-mile stretch of channel where banks are actively eroding and water temperatures are increasing significantly due to poor riparian conditions. Addressing gravel

management in this reach is likely to be more cost effective than in the upper reaches. Re-vegetation of the hydraulic mine sites themselves would be difficult because of the coarseness of the material, and the large area involved. Also, allowing the gravel to be deposited into Spanish Creek supports the design of limited accessible harvesting in a sustainable manner.

Expected Results and Benefits to the Community

This project will conduct a thorough scientific study of the Spanish Creek watershed to quantify river geomorphology, flow, and sediment characteristics through field surveys and monitoring, data analysis, and computational modeling. A comprehensive and system-wide restoration strategy to significantly reduce erosion and sedimentation will be developed for the watershed. Specific anticipated results from the proposed project are as follows:

- (1) A comprehensive design strategy for gravel management and maintenance in Spanish Creek. The design will be based on analysis of river geomorphology, flow, and sediment transport characteristics coupled with computational modeling of gravel transport in the study reach. The design also will consider system-wide bed degradation and bank erosion as well as upstream gravel supply.
- (2) A conceptual design for bank stabilization throughout American Valley. We will investigate mechanisms of bank erosion and gravel deposition using data analysis and computational modeling. Based on this channel stability analysis, we will recommend cost effective, on-site bank erosion control techniques for bank protection. As a mountain stream with a geomorphologic evolution dominated by gravel transport, Spanish Creek requires selection of bank protection methods based on sediment characteristics and bank geometric properties.
- (3) A conceptual design for channel stabilization and riparian habitat establishment from Wapaunsie Creek to State Highway 70. In addition to the bank protection recommendations indicated above, we will complete a channel stabilization design with a focus on riparian vegetation. Currently, the entrenched Spanish Creek tends to develop meandering bends by depositing excess gravel sediments on the side. Reestablishing riparian vegetation is one method that will prevent migration of meandering loops and result in channel platform stability.
- (4) Strengthened partnerships within the watershed for water quality management and increased citizen understanding of watershed processes. This is a community improvement project that will involve participation of other FR-CRM members and citizens in every stage. In addition to the direct roles of Plumas National Forest, the California Department of Water Resources, CalTran, and DRI, other FR-CRM member agencies will participate in public meetings and project reviews. Citizens will participate in data collection, project monitoring, and project reviews.
- (5) Transfer technology of bedload modeling and improved gravel harvest techniques with other watersheds within the CalFed solution area. Restoration of Spanish Creek (especially the reduction of sediment load) will improve the local environment, benefit the community, and protect the properties of landowners and public facilities. Additionally, this project will improve water quality in the Bay-Delta area, which is downstream of the Feather River

watershed. Since the Environmental Protection Agency (EPA) listed sediment as the top nonpoint source pollutant, reduction of sediment load to the Bay-Delta area is consistent with federal agency priorities.

Project Relevance to CALFED Program Objectives

The primary objective of the proposed project is to develop a system-wide strategy for restoration of Spanish Creek, a severely impaired watershed within the Feather River basin. This project will provide a comprehensive watershed assessment and management plan to mitigate sedimentation and bank erosion. Stabilization of Spanish Creek will reduce sediment load as well as transport of other contaminants (e.g., nitrogen, phosphorous) to downstream reaches and the Bay-Delta system. This project will be a collaborative effort within FR-CRM, an alliance of federal, state, local, and private entities. Plumas Corporation, the lead FR-CRM entity for this project, will also utilize technical support from DRI and the U.S. Bureau of Reclamation, Denver Service Center. Since this project aims to benefit the local community and reduce sediment load to the downstream water system, a community-based approach will be adopted including participation of citizens in data collection, project monitoring, and community review of project progress.

As a result, completion of this project will build community capacity to assess and effectively manage watersheds that affect the Bay-Delta system; develop watershed assessments and management plans; and develop and implement specific watershed conservation, maintenance and restoration actions. Expected benefits and the community-based project approach are entirely consistent with CALFED Watershed Program priorities. Restoration of Spanish Creek will contribute to the overall goals of the CALFED Bay-Delta Program to improve water quality and reduce nonpoint source pollutants. Specific anticipated effects on various water quality issues are as follows:

Ecosystem and Water Quality:

Ecosystem quality within the Bay-Delta is dependent on the quality of inputs from upstream areas. Currently, it is estimated that 1.1 million tons of sediment are generated annually from the upper North Fork Feather River. Water temperatures are also elevated due to poor riparian conditions. The high concentration of suspended solids and the warm temperatures are hazardous to coldwater fish. By reducing sediment and temperature in the upstream area, this project will produce an incremental in ecosystem and water quality in the Bay-Delta region.

Water supply:

Completion of this project will not affect water supply.

Vulnerability of delta functions:

This project seeks to address several common problems within the Bay-Delta system including sustainable gravel harvesting; mid-channel bar-induced bank erosion; and stabilization of a channelized system. The completion of this project will provide a comprehensive gravel management plan and erosion reduction strategy for an entrenched channel. It is anticipated that this project will considerably benefit the ecosystem and water quality in the downstream. And, the channel stabilization and bank erosion control technology applied to this channel will be shared with other Cal-Fed agencies.

Community Involvement

Since the proposed project stems from community concerns, the community has been involved from its inception. Two public meetings have been held regarding the issue of bank erosion, and letters of support have been received from all landowners. The applicant is an existing, successful community partnership of 21 local agencies and groups that have been involved in similar projects for 17 years. While the technical nature of this project requires specialized training, the project will continue to involve landowners and the broader community in the following ways:

- (1) Organize four to six community meetings to inform community members on project progress. In each public meeting, the project team will describe progress to date and distribute a report for public review. The project team will carefully consider and respond to feedback from the community.
- (2) Involve citizens and local leaders in conceptual design review. The project team will come up with several design alternatives for review, including a cost/benefit analysis.
- (3) Involve volunteers in data collection and monitoring parameters such as temperature, flow, turbidity, and bank stability.

Watershed Context

The upper Spanish Creek sub-watershed received top ranking for restoration in a 1994 FR-CRM study entitled “East Branch North Fork Feather River Erosion Control Strategy.” Since that time, the FR-CRM installed and tested a pilot vortex gravel sampler (the first one in California). The sampler is a slotted pipe installed into the substrate which captures bedload as it moves downstream, and deposits it in an off-channel pond that can be harvested without entering the channel. Design flaws resulted in clogging, however, and re-configuration of the sampler is scheduled for summer 2002. The final report of that study was completed last December and indicated that a system wide bedload management plan and a comprehensive restoration strategy is needed to prevent further bank erosion and sedimentation throughout the valley. The FR-CRM would like to advance gravel harvesting technology by using data from the existing bedload sampler, combined with state-of-the-art bedload transport modeling to develop a comprehensive strategy.

Spanish Creek has been channelized within a populated floodplain, and must be treated within the existing channel. It is necessary to fully evaluate sediment transport within the entire system before a successful gravel harvest and erosion control project can be conceptualized. This proposal seeks the funds to study and predict large-particle sediment transport within this system.

Previous site-specific attempts at treating property loss have met with varying degrees of success. Localized riprap projects generally have transferred erosive power to softer bank areas. Some property owners have also removed gravel bars, which does not help achieve the fish habitat improvement objective of Fish and Game’s tightened regulations on commercial harvesting.

Support for Local Decision Makers

One of the landowners is the Community Services District, whose sewage treatment pond dikes are threatened by the eroding stream banks. The county's Department of Public Works also is involved with the project and supports the concept of studying and treating the system as a whole rather than piece-meal treatment of smaller sites. Two presentations to the County Board of Supervisors are planned to ensure that they remain informed, have input on the development of the restoration strategy, and can use this project to inform American Valley management decisions. Additionally, Caltrans is interested in using findings from this study as they design a bridge upgrade over Spanish Creek.

Technology Transfer

Plumas Corporation is the lead FR-CRM agency for this project. The collaborative project team includes members of the Feather River Coordinated Resource Management Group (FR-CRM), the Desert Research Institute (DRI), and the U.S. Bureau of Reclamation (USBR). The FR-CRM has previously worked with river sediment engineer, Dr. Jennifer Duan at the DRI-Las Vegas. Dr. Ted Yang at USBR would provide additional technical review and expertise. Dr. Duan has successfully modeled coarse bedload in mountain streams on the FR-CRM's Ward Creek project by using the EnSed2D sediment transport model. The development of the EnSed2D model is currently funded by two research projects awarded to Dr. Duan by the Army Research Office and the Army Corps of Engineers. The EnSed2D model has also been applied to the West Jordan River, Utah and the Kankakee River, Illinois for river restoration design. The Spanish Creek project would provide a larger scale and more complex system for the model. This modeling study expects to develop a feasible gravel management plan and other riparian ecologic and engineering treatments at specific sites.

The design of this modeling effort (as well as the results) will be made available to other watershed groups in the CalFed solution area to facilitate more accurate prediction of large-particle sediment transport and deposition as well as to incorporate that into restoration project planning. Since the identified channel stabilization and bank erosion control techniques can be applied to similar mountain river watersheds, this project will serve as a demonstration site for other CalFed mountain stream restoration projects. Additionally, we will seek to publish the results of this study in peer-reviewed hydrology journals, which the FR-CRM can distribute to the CalFed community and other watershed groups in California.

PART C – PROPOSED SCOPE OF WORK (Part C not to exceed 5 pages)

Background and Goals

We propose to conduct a thorough scientific assessment of the geomorphology and hydrology at Spanish Creek in the North Fork Feather River watershed and develop a comprehensive restoration strategy to mitigate erosion and sedimentation. This investigation will address issues of bank erosion, sedimentation, water quality and habitat restoration, which are common throughout the Bay-Delta watershed.

Developing solutions to these problems requires an understanding of historic and current activities that have led to the present condition. Spanish Creek, located in the upper Feather River watershed, has been subject to intensive use for the past 150 years; including hydraulic mining and stream channelization, as well as on-going urban development, timber harvesting, grazing, and road building. The Spanish Creek watershed encompasses 95 square miles above American Valley with an annual precipitation of 55 inches. The Plumas County seat, Quincy, is in American Valley. Plumas County is an income-eligible, rural county.

American Valley is the naturally evolved floodplain of Spanish Creek. Extensive large-scale hydraulic mining operations in the mid- to late-1800's led to the deposition of millions of cubic yards of coarse gravel and cobble adjacent to Spanish Creek and its upstream tributaries. Episodic release of these stored tailings resulted in excessive deposition of bedload material throughout American Valley. In turn, the bedload material exacerbated flooding. Per state law, debris dams were built to hold back the extensive sediment, but these began to fail in the early 1900s. Increasing urbanization during this period led to the beginnings of channelization of Spanish Creek through American Valley when ranchers began moving Spanish Creek toward the north side of the valley. Various public agencies continued that work in the mid-1900's and increased the size of the channel.

At the upstream end of American Valley is an existing gravel mining operation, originally established to take full advantage of depositional sites. This operation initially harvested enough coarse bedload to prevent further aggradation of the channel and meet community needs. As community needs expanded, however, the operation began to overdraft the supply and contributed to ever-greater channel entrenchment (up to 15 feet deep) and diminished gravel supply for downstream channel maintenance. Within the past seven years, the amount of gravel extracted has been curtailed in response to permitting requirements implemented by the California Department of Fish and Game. As a result of the curtailment, more and more gravel is transported and deposited downstream within American Valley. As is the case with many entrenched, low gradient channels, the gravel through American Valley is deposited as alternating point bars. The bar formation is a physical response by the channel system to enhance and maintain sediment transport. The result is greater pressure on high, vertical banks, which further accelerates bank erosion. This erosion is damaging valuable agricultural lands and public infrastructure facilities, and is contributing sediment to the Feather River system. Without intervention, the erosion will continue until an adequate floodplain is formed within the channel gully.

In 1999, several landowners concerned about the accelerated bank erosion along Spanish Creek asked the Feather River Coordinated Resource Management Group (FR-CRM) for assistance. The FR-CRM is an integral part of the Central Valley Regional Water Quality Control Board's Watershed Management Initiative for the Feather River (CVRWQCB WMI pp.118-120). Plumas Corporation is the primary implementation entity of FR-CRM. The CRM's involvement began with two public meetings of landowners and other interested parties. These meeting led to a consensus among all Spanish Creek landowners to thoroughly study the situation and develop a comprehensive plan rather than address each problem individually, which exacerbates erosion in adjoining channel areas. Many of the landowners, including the Quincy Community Services District, which has already lost a sewage treatment pond dike to bank erosion, understand the need for an integrated strategy but also have short-term emergency issues to address. These landowners

are currently taking a minimalist approach in cooperation with the FR-CRM while a comprehensive plan is funded, developed, and implemented.

The long-term goals for the Spanish Creek watershed are to (1) stabilize the entrenched channel by reducing sedimentation and bank erosion; and (2) build the community's capacity to collaborate and implement sound watershed management practices. These goals are consistent with the CVRWQCB's WMI key issues for the Sacramento River watershed (i.e., sediment and erosion problems from land use activities). The technical challenge is to accommodate and manage the known high bedload supply. To achieve this goal, we propose to quantify river geomorphologic, flow, and sediment characteristics through field survey and monitoring methods. These data will be used to model sediment transport and associated bed degradation/aggradation and bank erosion processes. Results will then be used to develop a watershed-wide, comprehensive restoration plan and provide design criteria for channel restoration.

PROPOSED WORK TO BE PERFORMED

The primary objective of this project is to develop a detailed assessment and comprehensive restoration strategy for the Spanish Creek watershed from its headwaters to the bottom of American Valley. Tasks to be accomplished are as follows:

Task 4. Collect and analyze field data to quantify channel geomorphologic, flow, and sediment characteristics.

The purpose of this task is to provide the geometric, sediment, and bank data necessary for a computational sediment transport and river geomorphic model that can assist in predicting sediment movement. The field survey data are expected to directly generate input files for the computational model.

- 4.1 Divide the study area into reaches with similar geomorphic characteristics, using aerial photographs and a field reconnaissance survey.
- 4.2 Collect field data which characterizes each reach in terms of meander pattern geometry, cross sectional geometry, sediment, bank geometry and material, vegetation, and grade controls.
- 4.3 Collect sediment and bank material samples according to Desert Research Institute (DRI) existing Quality Assurance protocols.
- 4.4 Analyze sediment and bank samples to characterize size, transportation/deposition, and resistance characteristics at the DRI soil laboratory, in accordance with DRI existing Quality Assurance protocols.

Task 4 deliverables: 4.1 A map outlining study area reaches; 4.4 electronic spreadsheet of field data and sample analysis.

Task 5. Apply the EnSed2D sediment transport model using data collected in Task 4.

EnSed2D is a depth-averaged two-dimensional numerical model with the capability of simulating flow hydrodynamics, multiple grain-sized sediment transport, bank erosion, and alluvial channel geomorphic processes. The modeling results will quantify the rate of sediment transport throughout the length of Spanish Creek and identify locations where bars or pools will develop under varying sediment input regimes.

5.1 Quantify and identify gravel deposition, bed aggradation, and bank erosion, using model results.

5.2. Identify the erosion potential of various bank locations and prioritize locations for treatment, using model results.

Task 5 deliverables: 5.1 Summary narrative and electronic spreadsheet of model results; 5.2 treatment location and prioritization report and map.

Task 6. Develop a comprehensive design strategy for gravel management and maintenance in Spanish Creek, using results of model simulations.

Inherent in the strategy for restoration of Spanish Creek, is the fact that it must stay within the existing gullied channel. The purpose of this task is to develop a design that facilitates processes within the entire length of the entrenched channel to reach sediment transport equilibrium and reduce bank erosion. Strategies that will be considered in the comprehensive design include bank controls that regulate bar formation, gravel detention basins, and other gravel management strategies, such as the vortex sampler.

Task 6 Deliverables: A Comprehensive Design Strategy report, including alternatives, a narrative, and maps.

Task 7. Develop a conceptual design for channel and bank stabilization within the entrenched channel throughout American Valley, using results of model simulations.

The purpose of this task is to reduce on-site bank erosion. Both bank toes and bank slopes will be addressed.

7.1 Evaluate site-specific locations identified in Task 5 for potential use, and potential for success, of known stabilization technologies such as toe armoring, slope stabilization, flexible mattresses, dikes, retards, retaining walls, flow deflectors, vegetation, vanes, etc.

7.2 Develop the conceptual design, including alternatives, and cost/benefit analyses.

Task 7 deliverables: 7.2 Conceptual design report.

Task 8. Conceptually design channel stabilization and riparian habitat establishment within the broader floodplain area from Wapaunsie Creek to Hwy. 70.

This segment of the project area has a broader floodplain than is available in the American Valley segment. Therefore, channel stabilization here will focus on re-establishing riparian vegetation.

This segment of channel is also characterized by unstable braided channels from the excessive sediment load. Riparian vegetation will help establish and maintain a stable single channel.

8.1 Develop the conceptual design, including alternatives, species to be used, propagation needs, and cost/benefit analyses. Use field survey observations and model results to determine the most effective areas for riparian vegetation establishment.

Task 8 Deliverables: 8.1 Conceptual design report for Wapaunsie Cr to Hwy 70.

Task 9. Strengthen partnerships and build community capacity within the watershed for water quality management.

The purpose of this task is to develop the Spanish Creek watershed community's understanding of watershed processes and human influences on watershed health.

9.1 Develop a mailing list of interested persons in the Spanish Creek watershed, and distribute four project updates (every six months).

9.2 Identify and train a core group of volunteers to assist the FR-CRM in monitoring temperature, flow, turbidity, and bank stability in Spanish Creek.

9.3 Conduct four to six public meetings throughout the project, to present findings of the assessment, and discuss alternative management strategies.

9.4 Distribute four to six press releases to the local newspaper regarding project activities.

9.5 Develop Spanish Creek Assessment presentation display materials that explain the project and the watershed processes being studied.

9.6 Conduct two informational presentations/discussions to the County Board of Supervisors regarding watershed management options.

9.7 Construct and install a temporary (summer 2004 & 2005) informational sign on Bucks Lake Road regarding the project.

Task 9 Deliverables: 9.1 Project Updates; 9.2 volunteer-collected data; 9.3 public meeting agendas, summaries, and list of attendees; 9.4 Printed newspaper articles; 9.5 photo of display materials; 9.7 photo of sign.

Task 10. Disseminate the application of this technology to other CalFed watershed groups.

The purpose of this task is to assist other CalFed watersheds in developing successful gravel management strategies and bank erosion treatments in confined, high bedload channels.

10.1 Publish study findings in a peer-reviewed hydrologic, or other appropriate scientific journal.

10.2 Attend and present findings at two CalFed (or other area) watershed restoration conferences.

10.3 White paper on the study's findings, and its applicability to other systems distributed to other watershed groups and agencies within the CalFed solution area.

10.4 Conduct a tour for other watershed groups of the project area, and present the study's findings.

Task 10 Deliverables: 10.1 manuscript submitted for publication; 10.2 Conference presentation abstract; 10.3 White paper and distribution list; 10.4 tour agenda and attendee list.

Task 1: Project Administration	
1.2 Quarterly/Monthly Progress Reports	Sept 10, 2003 & quarterly thereafter
1.5 Contract Summary Form	Sept 10, 2003
1.6 List of subcontracted tasks, Good Faith Effort documents, quarterly/monthly Utilization Reports	With appropriate quarterly reports
1.7 Subcontractor Documentation	With appropriate quarterly reports
1.8 Expenditure/Invoice Projections	Sept 10, 2003 & semi-annually thereafter
1.9 Project Survey Form	June 1, 2005
Task 2: CEQA/NEPA Documents and Permits, if applicable	
2.1 CEQA/NEPA Documentation	
2.2 Permits	Sept. 10, 2003
Task 3: Quality Assurance Project Plan, if applicable (DRI SAP)	Sept 10, 2003
Task 4: Collect & analyze field data	
4.1 reach delineation map	Sept 10, 2003
4.4 field data spreadsheet and analysis	Apr 10, 2004
Task 5: Apply EnSed2D model	
5.1 summary narrative & spreadsheet	July 10, 2004
5.2 treatment location map & report	July 10, 2004
Task 6: Gravel management strategy	Sept 10, 2004
Task 7: Amer. Valley channel & bank design	
7.2 design report	Jan. 10, 2005
Task 8: Wapaunsie to 70 design	
8.1 design report	Apr 10, 2005
Task 9: Partnerships and community capacity	
9.1 project updates	With appropriate quarterly reports
9.2 volunteer-collected data	Sept 10, 2004
9.3 public meeting documentation	With appropriate quarterly reports
9.4 newspaper articles	With appropriate quarterly reports
9.5 display materials	Apr 10, 2005
9.7 roadway sign	Apr 10, 2004
Task 10: Technology transfer	
10.1 journal manuscript	Apr 10, 2005
10.2 conference presentation abstracts	Apr 10, 2005
10.3 white paper & distribution list	Apr 10, 2005
10.4 tour agenda & attendee list	May 1, 2005
Task 11: Draft and Final Reports	
11.1 Draft Report	May 1, 2005
11.2 Final Report	June 1, 2005

PART D1 - BUDGET SUMMARY SHEET – TASK BUDGET BREAKDOWN (Parts D1 and D2 combined not to exceed 2 pages)

	Proposition 13 Funds	Other Project Funds	Total Budget
1. Task 1 – Project Administration	\$ 40,000	\$	\$ 40,000
2. Task 2 – CEQA/NEPA Documents and Permits	\$ 1,000		\$ 1,000
3. Task 3 – Quality Assurance Project Plan		\$ 2,000	\$ 2,000
4. Task 4 – Collect & Analyze field data	\$ 55,000	\$ 35,000	\$ 90,000
5. Task 5 – Apply EnSed2D model	\$ 40,000	\$ 10,000	\$ 50,000
6. Task 6 – Gravel mgmt strategy	\$ 10,000	\$ 3,000	\$ 13,000
7. Task 7 – Amer. Valley design	\$ 5,000	\$ 3,000	\$ 8,000
8. Task 8 - Wapaunsie to 70 design	\$ 5,000	\$ 2,000	\$ 7,000
9. Task 9 - Partnerships & Community Capacity	\$ 6,000		\$ 6,000
10. Task 10 - Technology transfer	\$ 5,000		\$ 5,000
11. Task 11 - Draft and Final Reports	\$ 3,000		\$ 3,000
TOTAL BUDGET	\$170,000	\$ 55,000	\$225,000

PART D2 - BUDGET SUMMARY SHEET – LINE ITEM Budget (Parts D1 and D2 combined not to exceed 2 pages)

	Proposition 13 Funds	Other Project Funds	Total Budget
1. Personnel Services	\$ 50,000		\$ 50,000
2. Operating Expenses	\$ 11,000		\$ 11,000
3. Property Acquisitions			
a. Equipment			
b. Furniture			
c. Portable assets			
d. Electronic data software/hardware			
e. Processing equipment			
f. Miscellaneous			
4. Professional and Consultant Services	\$ 90,000	\$ 55,000	\$145,000
5. Contract Laboratory Services	\$ 10,000		\$ 10,000
6. Construction Expenses			
7. General Overhead	\$ 9,000		\$ 9,000
8. TOTAL BUDGET	\$170,000	\$55,000	\$225,000

9. Describe the source and nature of the matching funds.

\$20,000 in-kind from Desert Research Institute for their facilities and some personnel time

\$35,000 in-kind from Calif. Dept. of Water Resources for aerial contour mapping

NOTES:

1) A SUBCONTRACTOR OR CONSULTANT CANNOT BE A PROJECT DIRECTOR FOR THE APPLICANT. SHOW ONLY THE APPLICANTS STAFF COSTS.

2) THE SWRCB AND CALFED RESERVE THE RIGHT TO ADJUST PROJECT AWARDS. APPLICANTS MAY BE ASKED TO REDUCE THEIR PROJECT BUDGETS.

PART E – PROJECT MAP (single 2- sided 8” x 11’, or single 1-sided 11” x 17” page maximum)

Provide a map of your project area, if appropriate. This can also be a chart or outline if your proposed project is not area specific.

PART F – ENVIRONMENTAL INFORMATION FORM (3 pages maximum)

ENVIRONMENTAL INFORMATION FORM

Please indicate what permits or other approvals may be required for the activities contained in your proposal and which have already been obtained. Please check all that apply.

LOCAL PERMITS AND APPROVALS	Needed?	Obtained?
Conditional use permit	no	
Variance	no	
Subdivision Map Act	no	
Grading permit	no	
General plan or Local Coastal Program amendment	no	
Specific plan approval	no	
Rezone	no	
Williamson Act Contract cancellation	no	
Local Coastal Development Permit	no	
Other		
STATE PERMITS AND APPROVALS	Needed?	Obtained?
Scientific collecting permit	no	
CESA compliance: 2081	no	
CESA compliance: NCCP	no	
1601/03	no	
CWA 401 certification	no	
Coastal development permit	no	
Reclamation Board approval	no	
Notification of DPC or BCDC	no	
Other		
FEDERAL PERMITS AND APPROVALS	Needed?	Obtained?
ESA compliance Section 7 consultation	no	
ESA compliance Section 10 permit	no	

Rivers and Harbors Act	no	
CWA 404	no	
Other	no	
PERMISSION TO ACCESS PROPERTY		
Permission to access city, county or other local agency land. If “yes,” indicate the name of the agency: _____	no	
Permission to access State land. If “yes,” indicate the name of the agency: _____	no	
Permission to access federal land. If “yes,” indicate the name of the agency: _____	no	
Permission to access private land. If “yes,” indicate the name of the landowner (if multiple landowners, indicate how many individuals will be involved and what percentage have already granted permission: all have granted permission – see attached letters	yes	

PART G – LAND USE QUESTIONNAIRE (2 pages maximum)

PART - LAND USE QUESTIONNAIRE

1. Do the actions in the proposal involve construction or physical changes in the land use?
Yes____ No__X__

If you answered “yes” to # 1, describe what actions will occur on the land involved in the proposal.

If you answered “no” to # 1, explain what type of actions are involved in the proposal (i.e., research only, planning only). Research and planning

2. How many acres of land will be subject to a land use change under the proposal? __0__
3. What is the current land use of the area subject to a land use change under the proposal? What is the current zoning and general plan designation(s) for the property? Does the current land use involve agricultural production?

Proposals for management would involve no change in land use. Gravel harvesting areas would remain, as would the agricultural areas adjacent to the creek.

- a) Current land use mostly gravel harvesting and ag
b) Current zoning some R-10 and S-3 land
c) Current general plan designations: various sections within the project area have one of the following designations: general forest, floodplain, mining, recreation, recreation commercial, periphery commercial, industrial, R-10, S-3, ag preserve, mobile home, special plan scenic area, special plan design review, open space
d) Does current use involve agricultural production? Yes
4. Is the land subject to a land use change in the proposal currently under a Williamson Act contract?
No
5. What is the proposed land use of the area subject to a land use change under the proposal? N/a
6. Will the applicant acquire any land under the proposal, either in fee (purchase) or through a conservation easement? No
- a) If you answered “yes” to 6, describe the number of acres that will be acquired and whether the acquisition will be of fee title or a conservation easement:
b) Total number of acres to be acquired under proposal _____
c) Number of acres to be acquired in fee _____
d) Number of acres to be subject to conservation easement _____

7. For all lands subject to a land use change under the proposal, describe what entity or organization will manage the property and provide operations and maintenance services.
N/A
8. Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal? Yes
9. For land acquisitions (fee title or easements), will existing water rights be acquired? N/A
10. Does the applicant propose any modifications to the water right or change in the delivery of the water?
No

If “yes” to 10, please describe the modifications or changes.

PART H – SUPPORTING DOCUMENTATION (10 pages maximum)

Include an example of notifications of your intended application to local governments and tribes in whose jurisdiction your project takes place, and a list of their responses, if available. While response is not required, your proposal will be stronger if it contains both notification and responses. Please note that response letters (but not the example and list) are *in addition to* the page allowance.

Also include here summaries of qualifications for the principals and major partners expected to be involved with implementing your proposal. DO NOT include newsletters, brochures, photographs or other promotional materials that are not directly pertinent to your proposal specifics.